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a server coupled to the network, the server validating data entry relating to a patient treatment plan to an input form in a predetermined sequence and visualizing patient data in response to a user request.

REMARKS

The Office Action rejected claims 11 and 13-15 under Section 102(e) as anticipated by Jao (USPN 6,283,761). Claims 1-10, 12 and 16 were rejected under Section 103(a) as unpatentable over Jao in view of Andreiko et al. (USPN 5,683,243). Additionally, claims 17-25 were rejected for the same reasons as given for the rejection of claims 2-10. As detailed below, the rejections are traversed in part and overcome in part, and Applicants submit that all claims are in condition for allowance.

The Section 102(e) Rejection

A Section 102 Rejection requires that each and every element of each claim be present in Jao. Claim 11 has been amended to include the limitation of the treatment plan relating "to an input form in a predetermined sequence" as found in claim 1, which was not rejected under Section 102. Withdrawal of the Section 102 rejection on independent claim 11 and dependent claims 13-15 is respectfully requested.

The Section 103 Rejection

Claims 1-10, 12 and 16 were rejected under Section 103(a) as unpatentable over Jao in view of Andreiko et al. (USPN 5,683,243). Additionally, claims 17-25 were rejected for the same reasons as given for the rejection of claims 2-10.

As noted in the rejection, Jao does not show aspects such as receiving patient data from an input form and validating the dental patient data in a predetermined sequence. The Office Action asserted that "Andreiko suggests an engine adapted to receive the dental patient data in a predetermined sequence." Applicants respectfully traverse this assertion.

Andreiko relates to an apparatus for automatically designing and manufacturing a custom orthodontic appliance from anatomical shape data preferably of

the lower jaw and teeth of a patient includes a scanner to produce images in three dimensions, a computer that constructs archforms and calculates finish tooth positions, then automatically designs an appliance, preferably including archwires and brackets, to move the teeth to the calculated positions and jigs to place the brackets on the teeth of the patient, and program controlled machines for making the brackets, wires and jigs to the appliance design driven by commands derived from digitized tooth and jaw shape data. Andreiko is absolute silent about an engine that receives and validates dental patient data in a predetermined sequence.

The Office Action cites to Col. 21, line 48 through Col. 22, line 56 as showing the claimed data receiving/validating engine. As discussed on pages 14-15 of the instant specification, the engine of the present invention performs a validity check of the diagnostic entry (step 358). The entered data can be crosschecked against a case selection criteria to ensure that the submitted case is acceptable for treatment. In one embodiment, the answers from each question prompt specific subsequent questions. For example, when a treatment goal input is given, the system checks that the input is compatible with previous diagnostic input, that the treatment goal is realistic with what is deemed acceptable, and that the treatment goal is compatible with other previously entered treatment goals. The data that has been input will generate further questions, and eliminate possible questions that do not have to do with that particular patient. In other embodiments, specific questions are generated to guide the doctor through a plan for how to get the teeth from their start to end position. The system then performs a validity check of the treatment plan entry (step 366). This validity check ensures that the doctor does not enter two incompatible answers that would involve the teeth running into each other, or not heading in the direction of the goal, among others. In another embodiment, the engine generates a summary for review by the doctor to allow the doctor to review all of the entered data and ensure that it is in accordance with what he intended.

The cited section in Andreiko corresponds to Andreiko's Fig. 2A, and this Figure relates to receiving treatment information input including Doctor/Patient ID input (Fig. 2E), treatment information input (Fig. 2F), mandibular bone data input (Fig. 2G),

maxillary tooth plan view data input (Fig. 2H), and tooth vertical profile input (Fig. 2I). However, Figs. 2A and 2E-2I show no data validation engine. The word "validation" does not exist in Andreiko. Andreiko does not have such data validation capability. Hence, since Andreiko does not use logic rules to validate data entry, Andreiko cannot provide any of the advantages of the present invention, as described in the Specification beginning at page 3, line 14:

"The system also prevents an orthodontist from entering conflicting diagnoses. Because a patient's teeth and the way they define a bite are interrelated, a series of logical rules are used to crosscheck the diagnoses and to prevent an invalid diagnosis. The system also checks for and requires the entry of a diagnosis for any area for which one is required. This prevents one type of inaccuracy in diagnosis, in that a negative finding is equivalent to an incorrect positive finding.

The system also limits path choices based on the initial and end points for teeth. This prevents an inaccurate path by limiting the path choices to those that head in the correct direction. The system also prevents for the orthodontist from entering two conflicting paths. By cross checking the paths, the system can eliminate invalid paths.

Additionally, certain shortcomings of the appliances with regard to the biology, physics, and mechanics of tooth movement are known. Thus, the system considers the biology, physics, and material of tooth movement in optimizing the treatment plan. The system prevents the orthodontist from entering a goal that is not deemed attainable by the system and the information can be relayed to the doctor when a valid and accurate plan is described that involves these shortcomings. This will allow the doctor to tailor the plan to avoid any pitfalls inherent in the system. Moreover, the system provides feedback, for example direction and education, when the orthodontist is prevented from entering data not allowed by the system. Because there are multiple goals and paths to reach them, a quality result is not guaranteed from an accurate and valid diagnosis. Feedback when a mistake is made in the diagnosis can be used to educate and direct the thinking of the doctor which will perhaps lead to the redevelopment of an entirely new, better, plan, rather than the mere correction of the error which generated the feedback."

Since Andreiko lacks the data validation engine, Andreiko neither anticipates nor renders the invention obvious. Withdrawal of the §103 rejection is respectfully requested.

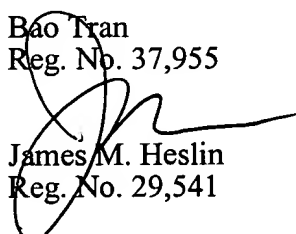
In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

Attached is a marked-up version of the changes made by the current amendment. The attached page is captioned with "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

11. (Amended) A virtual health-care treatment system, comprising:
a network to communicate information relating to **[the] a** community;
one or more patients coupled to the network;
one or more treating professionals coupled to the network; and
a server coupled to the network, the server validating data entry relating to a
patient treatment plan to an input form in a predetermined sequence and visualizing
patient data in response to a user request.